PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional) 13036/121 (MP1108)

Application Number	Filed
10/680,018	October 6, 2003

For: METHOD OF PRE-PROCESSING DATA ON A HOST MACHINE FOR A HOST-BASED PRINT SYSTEM

First Named Inventor Lyman Leonard Hall

Art Unit	Conf. No.	Examiner
2625	4703	Hilina Kassa

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Date: September 21, 2011 Name: Ryan Geitz, Reg. No. 62,164 Signature:

~~Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.~~

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five(5) pages may be provided.

I am the:

☐ Applicant/Inventor.

☐ Assignee of record of the entire interest.
See 37 CFR 3.71. Certificate under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

☒ Attorney or agent of record.
Registration number 62,164.

☐ Attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34. _____.

Signature

Ryan Gleitz
Typed or Printed Name

312-245-3423
Telephone number

September 21, 2011
Date

Note: Signatures of all inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*

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Date: September 21, 2011 Name: Ryan Gleitz, Reg. No. 62,164 Signature:

ATTORNEY DOCKET NO.
MP1108 (13036/121)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application:)
)
Lyman Leonard Hall et al.) Examiner: Hilina Kassa
)
Application No.: 10/680,018) Group: 2625
)
Filed: October 6, 2003) Confirmation No.: 4703
)
For: METHOD OF PRE-PROCESSING DATA)
ON A HOST MACHINE FOR A HOST-BASED)
PRINT SYSTEM)

Commissioner for Patents
P.O. Box 1450
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PRE-APPEAL BRIEF REQUEST FOR REVIEW

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Dear Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reasons stated on the attached sheets. No more than five (5) pages are provided.

REMARKS

I. Introduction

Claims 17, 19-23, and 26-29 are rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 7,016,061 ("Hewitt") in view of U.S. Patent No. 6,369,911 ("Hattori"), in view of U.S. Patent Application Publication No. 2002/0067509 ("Roylance"), and further in view of U.S. Patent No. 6,744,929 ("Okada"). Claims 30 and 31 are rejected under 35 U.S.C. §103(a) as being obvious over Hewitt in view of Roylance and further in view of Okada. Claim 36 is rejected under 35 U.S.C. §103(a) as being obvious over Hewitt, Roylance, Okada, and Hattori. Claims 32 is rejected under 35 U.S.C. §103(a) as being obvious over Hewitt, Roylance, Okada, Hattori, and U.S. Patent No. 5,915,079 ("Vondran").

II. None of the prior art references teach that the host machine combines the printer ready data with print engine control commands to create interim data.

Claim 17 recites "combining, by the host machine, the printer ready data with print engine control commands operable to control a print engine to create interim data having a second number of bits per plane per pixel, the second number of bits being lower than the first number of bits and higher than one bit per plane per pixel."

Claim 23 recites "a print data processor in the host machine configured to render printer ready data based on the examination of the page data and configured to combine the printer ready data with print engine control commands operable to control a print engine to create interim data having a second number of bits per plane per pixel, the second number of bits being lower than the first number of bits and higher than one bit per plane per pixel."

Claim 30 recites "combining, by the host machine utilizing the at least one processor, the printer ready data with print engine control commands operable to control a print engine to create interim data having a second number of bits rate per plane per pixel, the second number of bits rate being lower than the first number of bits rate and higher than one bit per plane per pixel."

The Office Action asserts that Hewitt and Hattori teach most of the subject matter "except for specifically teaching configured to combine the printer ready data with print engine control commands operable to control a print engine to create interim data having a second bit rate per plane per pixel." *See* p. 4. The Office Action looks to Roylance for these features.

Applicants respectfully disagree with the Office Action's characterization of Roylance for at least two reasons.

First, nothing in Roylance can be reasonably considered interim data created from the printer ready data and print engine control commands. Roylance describes a resolution enhancement procedure performed on the raster image before the raster image is sent to the print engine. *See* ¶42. The Office Action reasons that if the raster image is sent to the print engine, the raster image must contain "control information." However, Roylance's raster image contains neither control information nor print engine control commands. Roylance defines the raster image as an image bitmap made up of picture elements or pixels. *See* ¶3. Bitmaps do not include print engine control commands, and pixels cannot be construed as print engine control commands. Further, Roylance specifically states that rendering of the raster image occurs at the print engine. *See* ¶33. Therefore, Roylance does not teach or suggest interim data created from the printer ready data and print engine control commands.

Second, Roylance's procedures are not "by the host machine," as recited in claim 17, "in the host machine," as recited in claim 23, or "by the host machine utilizing the at least one processor," as recited by claim 30. The Office Action fails to recognize that all of the procedures taught by Roylance are performed by a laser printer. Roylance's text and line art enhancement circuitry, halftone image enhancement circuitry, and toner conservation circuitry are located in the laser printer. *See* Figs. 1, 2; ¶¶28, 29.

Therefore, Roylance does not teach or suggest "combining, by the host machine, the printer ready data with print engine control commands operable to control a print engine to create interim data," as recited by claim 17, "a print data processor in the host machine configured to render printer ready data based on the examination of the page data and configured to combine the printer ready data with print engine control commands operable to create interim data," as recited by claim 23, or "combining, by the host machine utilizing the at least one processor, the printer ready data with print engine control commands operable to control a print engine to create interim data," as recited by claim 30.

III. None of the prior art references teach that the interim data have a second number of bits lower than the first number of bits.

Claim 17 recites "generating page data having a first number of bits per plane per pixel from a first application running on a host machine ... [and] combining, by the host machine, the printer ready data with print engine control commands operable to control a print engine to create interim data having a second number of bits per plane per pixel, the second number of bits being lower than the first number of bits and higher than one bit per plane per pixel."

Claim 23 recites "a first software application on the host machine configured to generate page data having a first number of bits per plane per pixel ... [and] a print data processor in the host machine configured to render printer ready data based on the examination of the page data and configured to combine the printer ready data with print engine control commands operable to control a print engine to create interim data having a second number of bits per plane per pixel, the second number of bits being lower than the first number of bits and higher than one bit per plane per pixel."

Claim 30 recites "generating page data having a first number of bits per plane per pixel from a first application running on a host machine utilizing the at least one processor ... [and] combining, by the host machine utilizing the at least one processor, the printer ready data with print engine control commands operable to control a print engine to create interim data having a second number of bits per plane per pixel, the second number of bits being lower than the first number of bits and higher than one bit per plane per pixel."

The Office Action acknowledges that the Hewitt reference, the Hattori reference, and the Roylance reference all lack interim data having a number of bits per place per pixel lower that the first number of bits and higher that one bit per plane per pixel. *See* p. 6. The Office Action looks to Okada for these features. Applicants respectfully disagree with the application of Okada.

Okada describes an image data compression method in a digital camera. *See* col. 7, lines 40-43. Okada is not related to interim data created from printer ready data and print engine control commands operable to control a print engine. As part of the data compression method, 12 bit pixel data is divided into higher order bit data and lower order bit data. *See* col. 8, lines 29-38. The higher order bit data is compared against a predicted value calculated from nearby pixels. *See* col. 8, line 58 – col. 9, line 15. The lower order bit data is shifted into higher bit positions depending on whether the pixel is an odd numbered pixel or an even numbered pixel. *See* col. 9, lines 32-48. In this way, 12 bit raw data is converted to 8 bit data for output to a CRT or printer.

See col. 11, lines 53-67. However, the 8 bit data is not interim data created from printer ready data combined with print engine control commands operable to control a print engine.

Therefore, Okada cannot be relied upon for interim data created from the printer ready data and print engine control commands operable to control a print engine and having a second number of bits per plane per pixel lower than the first number of bits and higher than one bit per plane per pixel.

IV. The proposed combinations of the prior art including the Hewitt and Okada references are improper.

If the Office Action is relying on Okada for the broad teaching that image data may exist in a first bit rate per plane per pixel and a second bit rate per plane per pixel such that the second bit rate lower than the first bit rate and higher than one, Applicants respectfully submit one of ordinary skill in the art at the time the invention was made could not have modified Hewitt in view of Okada to reach the claimed invention.

Hewitt describes "JetReady" or hardware-ready bits (HRB) file that can be directly fed into a hardware imaging pipeline. *See* col. 4, lines 1-10. The HRB file is fed directly to the print engine "without the need to be reprocessed by the formatter." *See* col. 5, lines 16-17. Data that can be fed directly to the print engine has only a single bit per plane per pixel.

A combination of references cannot render the prior art unsatisfactory for its intended purpose or change the principle operation of reference. *See* M.P.E.P. §2143.01. Hewitt's principle operation and intended purpose includes hardware ready bits that can be directly fed into a hardware imaging pipeline. If Hewitt was modified to use the 8 bit data, Hewitt could no longer use hardware ready bits that can be directly fed into the hardware imaging pipeline. Accordingly, the combination would also lack both print engine control commands and interim data having a second number of bits per plane per pixel, the second number of bits being lower than the first number of bits and higher than one bit per plane per pixel.

V. The proposed combinations of the prior art including the Hewitt and Roylance references is improper.

As discussed above, Roylance teaches various enhancement procedures performed by enhancement circuitry in a laser printer. Hewitt describes an HRB file that is fed directly into the print engine. If Hewitt was modified to include the enhancement circuitry of Roylance, the enhancement circuitry could not receive and process the HRB file. Thus, Hewitt could no longer use hardware ready bits that can be directly fed into the hardware imaging pipeline. Accordingly, the combination including the Hewitt reference and the Roylance reference is improper.

VI. Conclusion

For at least these reasons, Applicants respectfully request that the rejections of claims 17, 19-23, and 26-29 over the combination of Hewitt, Hattori, Roylance, and Okada be withdrawn. The Gibson and Vondron references were only relied upon for the rejection of dependent claims. Because the dependent claims are allowable at least because of their dependency from an allowable independent claim, a detailed discussion of the Gibson and Vondron references is omitted. However, Applicants submit that the Gibson and Vondron references do not address the deficiencies of Hewitt, Hattori, Roylance, and Okada, and, in addition, that the dependent claims are patentable in their own right.

In view of the remarks above, Applicants respectfully submit that all of the pending claims are in condition for allowance and seek an early allowance thereof. If the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, the Examiner is respectfully requested to contact the undersigned at (312) 840-3225.

Respectfully submitted,

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